ABSTRACT OF THE DISCLOSURE

An apparatus and method are provided that disassociates the power consumed by a processing system from the instructions that it executes. The apparatus includes a power predictor that predicts the power that will be consumed by the processing system during execution of particular instructions, and a subsystem inhibition control, that selectively turns on/off available subsystems within the processing system based on the power that is predicted to be consumed. By predicting the power that will be consumed during execution, and by selectively turning on/off particular subsystems, the total power consumed by the processing system can be made invariant, or random. In either case, a counterweight current can be added to the processing system, depending on which of the subsystems are available to be turned on/off, and which are turned on/off, to further disassociate the total power consumed by the processing system from the instructions it is executing.